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ABSTRACT

Since student ratings of teacher effectiveness are instrumental in faculty promotion and tenure decisions, the assets and limitations of such ratings must be understood. To investigate the impact of three personality factors (ability, locus of control, and self-esteem) and academic performance on expectation and attributions of performance, 212 college students (139 female, 73 male) completed two questionnaires. The first questionnaire assessed personality factors and was administered prior to examinations. The second questionnaire assessed expectation and attribution of grades and was administered immediately after the students received feedback on their exam performance. The attribution items were worded in a positive direction for those students who experienced success and in a negative direction for those students who experienced failure. An analysis of the results showed that ability and grade influenced expectation. Self-esteem, as well as grade and expectation, predicted attributions. Self-esteem was negatively related to both internal, stable and external, unstable factors. Grade, although a potent predictor of expectation, was less important than expectation in predicting attributions. Students who experienced success endorsed a variety of attributions exhibiting a "yes" response style. Those experiencing failure exhibited a "no" response style; however, they did not blame the teacher nor did they identify other factors as causes. (BL)

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SELF ESTEEM, EXPECTATION AND
ATTRIBUTION OF RESPONSIBILITY
FOR ACADEMIC PERFORMANCE

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Students' attributions of their grades were studied in order to clarify the meaning of student ratings of teacher effectiveness. Two hundred twelve lower-division students in a required lecture class completed two questionnaires designed to assess personality traits (ability, locus of control, and self esteem), expectations, and attributions. The design of the 15-item attribution questionnaire was unique to this study. The items were worded in a positive direction for those who experienced success and in a negative direction for those who experienced failure. Results indicate that ability and grade influenced expectation. In addition, self esteem, as well as grade and expectation predicted attributions. Self esteem was negatively related to both internal, stable and external, unstable factors. Grade, although a potent predictor of expectation, was less important than expectation in predicting attributions. Students who experienced success endorsed a variety of attributions exhibiting a "yes" response style. In contrast, those who experienced failure exhibited a "no" response style, they did not blame the teacher nor did they identify other factors as causes. Studies designed to assess the impact of teacher characteristics and class structure on the expectations of students regarding their performance are the suggested next step in unraveling the meanings of student ratings of teacher effectiveness.

Student ratings of teacher performance affect promotion and tenure of the faculty of most American Universities. Although this policy has been criticized (Rodin, 1982), such ratings continue to be among the most important data used for teacher evaluation. In order to avoid a backlash against student input, it is imperative that the assets and limitations of students' ratings be studied thoroughly.

The psychological literature contains some information pertaining to the meanings of students' ranking of teachers. It is a popular belief among faculty, and well founded according to research evidence

CG 017211

(Rodin, 1982), that the grade the student receives in a class is correlated with the "grade" that the student gives to the teacher.

A few authors (Arkin and Maruyama, 1979; Forsyth and McMillan, 1981; Gilmor and Reid, 1979; Ramanaiah and Adams, 1981; Simon and Feather, 1973) have studied students' perceptions of the causal attributions of their grades. Overall, these studies found that students who are successful academically attribute their high grade to internal causes, whereas those who are unsuccessful attribute their low grade to external causes. Simon and Feather (1973), among others, have included expectation as a variable in addition to academic performance (grade). They conclude that it is the discrepancy between expectation and outcome rather than outcome alone that influences attributions. Simon and Feather (1973) have encouraged the attributional research community to focus on variables which may influence expectations. They propose that personality factors will be key in determining expectations, but not necessarily attributions.

The current study assessed the impact of three personality factors (ability, locus of control, and self esteem) as well as two subject variables (sex and class in school), and academic performance (grade on an exam) on expectation and attributions of performance. It is commonly assumed that students who receive a poor grade are likely to give their teacher a "poor grade," thereby blaming the teacher for their poor performance. The current study attempted to identify some student factors which may contribute to the understanding of this phenomenon, as well as further unravel the meaning of students' ratings of teachers' abilities.

Method

Subjects

All of the students (approximately 300) in a required lower-division course, "Introduction to the Social Sciences," were given the option to participate in this study for extra credit, 5 points per questionnaire (possible total of 10 points).

Instruments

The first questionnaire consisted of a 13-item ability test (items were selected from the 16 PF), a 10-item locus of control test (items were selected from Rotter's Internal/External Control of Reinforcement, 1966) and a 25-item self esteem test (Coppersmith Self Esteem Inventory, 1974). These personality measures were administered during the second week of class, prior to the administration of any exams.

The second questionnaire was designed to assess expectation and attributions of grades. The questionnaire was administered during the class session immediately after the students received feedback on their performance on an exam. Students were asked to reveal their expectation by indicating if they scored 1) higher than they expected, 2) lower than they expected, or 3) about what they expected. Students who marked the latter category were further asked to indicate whether or not they were pleased with their performance.

Fifteen attributions were measured using a 5-point Likert scale ranging from strongly agree to strongly disagree. The items included teacher ability, course organization, individual attention by instructor, fairness of the exam, student ability, student background, student interest in subject matter, study time, motivation to do well, luck,

meeting time of the class, classroom setting, textbook, difficulty of the exam, and circumstances during the exam.

The attribution items were worded in a positive direction (e.g., "Your test grade was high or higher than you expected because the instructor taught the course material well") for those respondents who indicated that they received a grade higher than they expected or received the grade they expected and were pleased with it. In contrast, the items were worded in a negative direction (e.g., "Your test grade was low or lower than you expected because the instructor did not teach the course material well") for those who indicated that they received a lower grade than they expected or received the grade they expected and were displeased with their performance. This method of assessing attributions which incorporates the direction of the causal factor is unique to this study and considered by the authors to be an advancement in attribution research.

Procedure

Each of the questionnaires was introduced by one of the researchers as a study of students' perceptions of their grades. Anonymity was discussed. Each questionnaire was filled out in the lecture hall and handed to the researcher.

Results

Subjects

Two hundred twelve subjects completed both the first and second questionnaires. Sixty-six percent ($N = 139$) of the subjects were female and 89% ($N = 188$) were freshmen and sophomores. Seventy-two percent of the female students were freshmen whereas only 50% of the male students

were freshmen. This difference suggests that the male students may have been slightly older than the female students (chi square = 11.6, $p = .009$).

The overall distribution of grades was approximately normal. As well, the distribution of grades for females was normal, in contrast to the distribution of grades for males which was bimodal. Males were more likely to score at the extremes (A and D grades) than were females. Females were most likely to score near the mean (B and C grades).

Sixty-five percent ($N = 142$) of the subjects received a grade lower than they expected while only 6% ($N = 14$) received a grade higher than they expected. Of those 29% ($N = 65$) who received the grade they expected 29% ($N = 19$) of these were happy with their grade.

Due to the unequal number of subjects per cell and to the fact that the dependent measures were Likert items, nonparametric statistics were used for most analyses. The personality measures were treated as interval level data. The attribution items were treated as ordinal data. Tau b and tau c were used as the correlational statistics for ordinal variables.

Personality Measures

The three personality measures were ability ($M = 9.06$, $SD = 1.9$), external locus of control ($M = 3.5$, $SD = 1.7$), and self esteem ($M = 18.27$, $SD = 1.7$). These measures were unrelated. Positive correlations between grades and ability ($r = .27$, $p = .000$) and between luck and external locus of control (tau c = .14, $p = .007$) lend some construct validity to both of these measures.

Personality measures and subject variables. Sex and class were unrelated to ability, locus of control, and self esteem.

Personality measures and grade, expectation, and satisfaction. Of the three personality measures only ability was related to grade ($r = .27$, $p = .0000$) and also to expectation ($\eta^2 = .21$, $F = 4.64$, $p = .01$). The students with the highest ability ($M = 9.6$) tended to get the grade they expected or a grade higher than they expected ($M = 9.46$); in contrast, the students whose grades were lower than they expected tended to have lower ability ($M = 8.79$).

Personality and attributions. Ability and locus of control did not predict attributions. Self esteem, however, was a useful predictor. The lower the subject's self esteem the more likely he/she was to believe that grades were caused by ability ($\tau c = -.18$, $p = .0003$) and background (preparation for the course) ($\tau c = -.11$, $p = .02$) (internal, stable factors), as well as the textbook ($\tau c = -.10$, $p = .03$), the fairness of the exam ($\tau c = -.09$, $p = .05$), the difficulty of the exam ($\tau c = -.09$, $p = .05$), and the conditions during the exam ($\tau c = -.11$, $p = .02$) (external, unstable factors).

Of the three personality characteristics assessed, only self esteem had an impact on attributions. Students with low self esteem tended to blame themselves as well as external, unstable factors for their performance.

Subject variables

Sex and class were not significantly related to grade, expectation or attributions.

Grade

Students who received higher grades were more likely than those who received lower grades to attribute this to the teacher ($\tau c = .17$, $p = .0005$), the organization of the class ($\tau c = .13$, $p = .004$), and the fairness of the exam ($\tau c = .12$, $p = .01$) (external, teacher items) and to the classroom ($\tau c = .10$, $p = .02$) (external). Those with lower grades endorsed their own motivation ($\tau c = -.09$, $p = .04$) and preparation for the class ($\tau c = -.10$, $p = .03$) (internal factors) as reasons. Those who received a higher grade endorsed the teacher as a reason, whereas those who received a lower grade tended to blame themselves.

Grade, expectation and satisfaction. Students who received a higher grade than they expected or got what they expected and were satisfied averaged a C to C+ grade ($M = 2.38$, $M = 2.48$). Those who scored lower than they expected or got about what they expected and were dissatisfied averaged a D+ grade ($M = 1.54$, $M = 1.8$) ($F = 8.06$, $p = .006$).

In order to ascertain the combined effects of grade and expectation on attributions the Likert items were treated as interval level data and two-way ANOVAs was performed. Expectation was significant as a main effect for all attribution measures except difficulty of the exam. In contrast, grade as a main effect was nonsignificant for all of the attributions. An interaction effect between grade and expectation was significant for the attribution study only. The results of the two-way ANOVAs reveal expectation is more critical than grade in predicting attributions of performance.

Expectation and satisfaction. Expectation and satisfaction were combined to make one variable with four nominal categories: higher than expected, about what expected and satisfied, lower than expected, and about what expected and dissatisfied. Overall, those students who got a grade higher than they expected or got what they expected and were pleased with it endorsed the attribution items (agree) to a greater extent than those who got lower than they expected and/or were displeased with their grade. The following attributions follow this pattern: ability (chi square = 23.62, df = 8, p = .003), background (preparation for the course) (chi square = 22.17, df = 8, p = .005), interest in the course (chi square = 25.19, df = 8, p = .000) (internal factors), as well as teacher (chi square = 19.05, df = 8, p = .01), organization of the class (chi square = 19.05, df = 8, p = .01) (teacher factors), as well as luck (chi square = 78.33, df = 8, p = .002) and classroom (chi square = 34.79, df = 8, p = .000) (external factors). Several additional attributions followed this pattern although the differences between the means were nonsignificant: fairness of the exam, individual attention given by the teacher, (teacher factors), as well as the amount of time available to take the exam, the textbook, and conditions during the exam (external factors).

The attributions that did not yield to this pattern are difficulty of the exam, motivation and study. Difficulty of the exam yielded no significant differences as a result of expectation. However, students who received grades lower than they expected endorsed this item to a greater extent (2.9 = undecided) than all other items except study (3.0 = undecided). Study (chi square = 22.24, df = 8, p = .004) and

motivation had similar patterns: students who received a grade higher than they expected did not attribute their success to study (2.3 = disagree) or motivation (1.9 = disagree) (internal factors). In contrast, students who scored lower than they expected rated study (3.0) and motivation (2.8), as well as difficulty (2.9) higher than any other attributions (range 1.8 to 2.6).

Expectation and satisfaction were critical variables in predicting attributions of academic performance. Students who responded to a success experience endorsed a variety of attributional factors, illustrating a "yes" response mode. In contrast, those who experienced failure tended to respond in a "no" mode; they did not place "blame" for their failure.

Discussion

Personality Measures

One goal of this study was to assess the impact of personality variables, ability, locus of control, and self esteem on both expectations and attributions. Simon and Feather (1973) predict that dispositional factors should impact expectations but not attributions. Ability was related to expectation, but not to attributions. Students with lower ability expected to receive higher grades than they actually did. The students in a classroom with lower ability may be more likely to receive lower grades, to be unrealistic about their capabilities, and to be disappointed as a result of the discrepancy between their expectations and actual achievement.

Locus of control was unrelated to either expectations or attributions. Ramanaiah and Adams (1981) found that locus of control was not a

predictor of expectation of academic performance in a similar situation and concluded that the classroom setting provides explicit cues arousing specific expectancies that overshadow dispositional cues such as locus of control.

Finally, self esteem was important in predicting attributions, but not expectations. Those with lower self esteem were more likely to endorse personal stable attributions as well as external unstable attributions. More so than the student with high esteem, they attributed their success or failure to themselves as persons, and to a variety of events beyond their control.

Simon and Feather (1973) assert that persons typically employ ego-enhancement and ego-defensive mechanisms in selecting attributions. We found that those students with low self esteem who succeeded attributed their satisfactory grades to personal stable characteristics, an ego-enhancement mechanism. But those students with low self esteem who failed did not employ ego-enhancement mechanisms, they blamed themselves. Low self-esteem students also tended to attribute performance to external events, which is ego-defensive for those who failed but not for those who succeeded. Self esteem may be partially explained by locus of control. A moderate but non-significant relationship found in this study between self esteem and locus of control ($r = .11$, $p = .06$) suggests that persons with low self esteem tend to have an external locus of control.

Grades

Grades were critically important in predicting expectations, but less so in predicting attributions. Those with average and low grades

were more likely to be unrealistic in the appraisal of their performance, they expected to score higher. To the extent that grades were important in predicting attributions, those with higher grades were more likely to endorse teacher items whereas those with lower grades were more likely to blame themselves. This finding contradicts the general belief (Rodin, 1982) that a student who receives a grade lower than expected will "blame" the teacher for his/her performance.

Expectation and Satisfaction

Overall, those who scored higher than they expected and those who were satisfied endorsed a variety of attributions. In contrast, those who scored lower than expected or were dissatisfied endorsed few attributions. Those who identified causes for their success illustrated a "yes" response style. They gave credit to their teacher, themselves, and to external events. In contrast, a "no" response style was characteristic of those who were asked to identify causes for their failure.

The attributions given the highest ratings by those who scored lower than they expected were study, difficulty of the exam and motivation, which were rated as "undecided." In stark contradiction, study, motivation, difficulty of the exam, plus amount of time available for taking the exam were the lowest rated items for students who performed higher than they expected. These items were rated as "disagree." These students who scored higher than they expected did not credit their success to study or motivation (internal, unstable factors and ego-enhancement mechanisms) but neither did they belittle their performance by attributing it to an easy exam.

Students who experienced success tended to exhibit a "yes" response style endorsing an array of attributions including teacher factors. To this extent, students who are pleased with their performance in a class may be expansive and liberal in giving the teacher a good evaluation. In contrast, those who experienced failure developed a negative response set. They did not blame the teacher, nor did they identify other causes for their failure. The correlation between student grade and teacher grade on evaluations (Rodin, 1982) may be mediated by expectations and produced in part by a "yes" response mode for those who experience success and a "no" response mode for those who experience failure. This commonly assumed correlation is not, however, mediated by a tendency on the part of those who experience failure to blame the teacher. Studies designed to assess the impact of teacher characteristics and class structure on the expectations of students regarding their performance is the next step in unraveling the meanings of student ratings of teacher effectiveness.

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TABLE 1

INTER-CORRELATIONS BETWEEN ABILITY,
GRADE AND EXPECTATION

	ABILITY	GRADE	EXPECTATION
ABILITY		R = .27*	ETA = .21*
GRADE			ETA = .36*
EXPECTATION			

*p < .05

TABLE 2

MEAN SCORES FOR ABILITY AS A FUNCTION OF EXPECTATION

EXPECTATION	ABILITY
1. LOWER THAN EXPECTED	8.79
2. ABOUT WHAT EXPECTED	9.6
3. HIGHER THAN EXPECTED	9.46

NOTE. F = 4.64, p = .01

TABLE 3

FREQUENCY DISTRIBUTION OF GRADE AND EXPECTATION

EXPECTATION	GRADE				
	A	B	C	D	F
1. LOWER THAN EXPECTED	0	21	55	41	22
2. ABOUT WHAT EXPECTED/DISPLEASED	2	12	19	6	3
3. ABOUT WHAT EXPECTED/PLEASED	2	9	4	2	0
4. HIGHER THAN EXPECTED	1	4	7	1	0

NOTE. CHI SQUARE = 38.19, DF = 12, P = .0001

TABLE 4

MEAN GRADE SCORES AS A FUNCTION OF EXPECTATION

EXPECTATION	GRADE
1. LOWER THAN EXPECTED	1.54
2. ABOUT WHAT EXPECTED/DISPLEASED	1.8.
3. ABOUT WHAT EXPECTED/PLEASED	2.48
4. HIGHER THAN EXPECTED	2.38

NOTE. F = 8.06, P = .006

TABLE 5

CORRELATIONS BETWEEN SELF ESTEEM, GRADE,
EXPECTATIONS AND ATTRIBUTIONS.

ATTRIBUTIONS	SELF ESTEEM	GRADE	EXPECTATION
1. TEACHER ABILITY	TAU C = .009	TAU C = .17*	ETA = .48*
2. STUDY TIME	TAU C = .01	TAU C = -.05	ETA = .29*
3. LUCK	TAU C = -.02	TAU C = -.003	ETA = .40*
4. MEETING TIME	TAU C = -.02	TAU C = .008	ETA = .27*
5. STUDENT ABILITY	TAU C = -.18*	TAU C = .04	ETA = .49*
6. CLASS ORGANIZATION	TAU C = .006	TAU C = .13*	ETA = .68*
7. TEXTBOOK	TAU C = -.10*	TAU C = -.006	ETA = .27*
8. EXAM FAIRNESS	TAU C = -.09*	TAU C = -.12*	ETA = .31*
9. EXAM DIFFICULTY	TAU C = -.09*	TAU C = -.08	ETA = .17
10. STUDENT MOTIVATION	TAU C = .03	TAU C = -.09	ETA = .28*
11. EXAM CIRCUMSTANCES	TAU C = -.11*	TAU C = .02	ETA = .37*
12. STUDENT INTEREST	TAU C = -.01	TAU C = .04	ETA = .27*
13. INDIVIDUAL ATTENTION	TAU C = -.002	TAU C = .05	ETA = .49*
14. CLASSROOM	TAU C = -.06	TAU C = .10*	ETA = .43*
15. STUDENT BACKGROUND	TAU C = -.11*	TAU C = -.09*	ETA = .54*

* $p < .05$

TABLE 6

MEAN SCORES FOR ATTRIBUTIONS AS A FUNCTION OF EXPECTATION

ATTRIBUTIONS		E X P E C T A T I O N			
		LOWER THAN	ABOUT WHAT	ABOUT WHAT	HIGHER
		EXPECTED	EXPECTED/ DISPLEASED	EXPECTED/ PLEASED	THAN EXPECTED
1. TEACHER ABILITY	2.0	1.7	3.5	3.2	
2. STUDY TIME*	3.0	3.8	3.9	2.3	
3. LUCK	2.6	2.3	3.2	4.3	
4. MEETING TIME	1.9	2.1	2.8	2.5	
5. STUDENT ABILITY	1.9	1.6	3.6	3.4	
6. CLASS ORGANIZATION	1.8	1.7	3.9	3.8	
7. TEXTBOOK	2.6	2.1	2.9	3.4	
8. EXAM FAIRNESS	2.5	2.2	3.5	3.2	
9. EXAM DIFFICULTY*	2.9	2.5	2.4	2.7	
10. STUDENT MOTIVATION*	2.8	2.8	3.7	1.9	
11. EXAM CIRCUMSTANCES	2.5	1.9	3.3	3.3	
12. STUDENT INTEREST	2.1	2.1	3.9	3.7	
13. INDIVIDUAL ATTENTION	1.8	1.8	2.8	3.0	
14. CLASSROOM	1.9	1.7	3.4	3.2	
15. STUDENT BACKGROUND	2.6	2.1	3.1	3.5	

NOTE. THERE ARE SIGNIFICANT RELATIONSHIPS BETWEEN EXPECTATIONS AND ALL OF THE ATTRIBUTIONS EXCEPT DIFFICULTY OF THE EXAM.

* STUDY TIME, STUDENT MOTIVATION AND EXAM DIFFICULTY WERE THE HIGHEST RATED ITEMS FOR STUDENTS SCORING LOWER THAN THE EXPECTED AND THE LOWEST RATED ITEMS, ALONG WITH MEETING TIME, FOR THOSE WHO SCORED HIGHER THAN THEY EXPECTED.